Suggested Citation: California Food Guide: Fulfilling the Dietary Guidelines for Americans. Sacramento, California: California Department of Health Care and California Department of Public Health; 2008. Available at http://www.cafoodguide.ca.gov/
The California Food Guide is a collaborative effort between the California Department of Public Health, the California Department of Health Care Services and the InterAgency Nutrition Coordinating Council.

Mark Horton, MD
Director
California Department of Public Health

InterAgency Nutrition Coordinating Council

Sandra Shewry
Director
California Department of Health Care Services

The California Food Guide is copyright free and available in web-based format only. It is designed to be photo-copied and used with a 3-hole binder.
PREFACE

The California Food Guide (CFG) is the culmination of over four years of collaborative work with nutrition experts within the state of California. It originated as a joint project between the California Department of Health Services (CDHS) and the InterAgency Nutrition Coordinating Council (IANCC). IANCC represents the California Departments of Health Care Services, Public Health, Education, Aging, Corrections and Rehabilitation; the Universities of California at Berkeley and Davis; the University of California Cooperative Extension; and California Dairy Council. Since the completion of CFG, CDHS has split into two new departments, the California Department of Public Health (CDPH) and the Department of Health Care Services (DHCS). As a result, it will be apparent to the reader that many of the references refer to the old department, CDHS. In subsequent versions the appropriate departments will be referenced.

This web-based edition is an update of the original 1990 hard copy document, which was formerly titled the California Daily Food Guide. In 2003 CDHS and IANCC formed the CFG Editorial Committee to assist with the selection of authors and the review process. Over a three-year period, the CFG Editorial Committee worked with the authors, outside academic reviewers, and California departmental staff in reviewing new dietary and physical activity recommendations, and revising chapters.

CFG Editorial Committee members developed chapter outlines and a comprehensive review system for chapters. Chapters are structured to address information about dietary patterns, dietary recommendations, public health implications, and opportunities for improvement. The contents of each chapter were based on a extensive review of the literature along with editorial review by experts.

During the development phase, CDHS, in collaboration with IANCC, invited food and nutrition experts in various state agencies to assist in the revision of the food guide so that the revised version would reflect updated federal nutrition guidelines, such as the Dietary Guidelines for Americans 2005 and the Dietary Reference Intakes. In addition, authors were also enlisted to develop chapters devoted to certain specialty topics, such as ethnic foods, pregnancy, lactation, and certain important topics such as obesity and environmental food contaminants.

The manuscript preparation and review process included the following:

CFG Editorial Committee and IANCC members selected chapter authors. Each chapter usually has one to four authors with one lead author and several co-authors. Lead authors and co-authors were provided with
instructional letters and guidelines for development of topic chapters. They were requested to select a minimum of three expert reviewers: one reviewer from within CDHS and two additional reviewers from outside CDHS. If the authors required assistance, CFG Editorial Committee members and authors provided suggestions for reviewers. Reviewers completed structured review forms with comments to the authors. Once the reviewer suggestions were incorporated, the lead author submitted the draft chapter, along with the completed reviewer forms, to the Editorial Chair. The Editorial Chair and assisting Research Scientist, conducted a preliminary review of the chapter, along with any additional edits, and sent the draft chapter to CFG Editorial Committee members. CFG Editorial Committee members reviewed the chapter and provided comments back to the Editorial Chair who worked closely with the authors to address the Editorial Committee concerns. Draft chapters underwent further review with Dr. Don Lyman, Chief of the Chronic Disease and Injury Control Division (CDPH)

CFG Editorial Committee Members:

Seleda Williams, M.D., M.P.H., B.H.E/Dietetics, Chair, DHCS
Angelique Lastinger, B.A., M.A., Assistant to Chair, DHCS
Don Lyman, M.D., D.T.P.H., CDPH
Susan Foerster, R.D., M.P.H., Chief, CDPH
Linnie Sallack, R.D., M.P.H, CDPH
Carol Chase, R.D., M.S., CDPH
Karla Maggie, R.D., M.P.H., CDPH
Rita Mitchell, R.D. UC Berkeley
Jan Lewis, R.D., M.A., California Department of Education (CDE)
Rae Lee, R.D, M.P.H., CDE
Paula Etcheberry, M.P.A., R.D, CDPH
Michelle Van Eyken, R.D., M.P.H., CDPH

Seleda Williams, M.D., M.P.H.
Chair, California Food Guide Editorial Committee
Public Health Medical Officer III
Office of Clinical Preventive Medicine
California Department of Health Care Services
CALIFORNIA FOOD GUIDE
AUTHORS

Desiree Backman, Dr.P.H., M.S., R.D., CDPH
Paula Benedict Griffin, M.P.H., R.D., CDPH
Mary Anne Burkman, M.P.H., R.D., Dairy Council of California
Jim Carman, M.S.
Sharmila Chatterjee, M.Sc., M.S., R.D., C.D.E., University of California San Diego Medical Center
Linda L. Cowling, M.P.H., R.D., CDPH
Catherine Culleton, M.S., R.D.,
Amy Fong, B.S., CDPH
Alyssa Ghirardelli, M.P.H., R.D., CDPH
Carol Hance, R.D., Contra Costa Health Services
Ella Hasso Haddad, Dr.P.H., M.S., R.D., Loma Linda University
Suzanne Haydu, M.P.H., R.D., CDPH
Georgia E. Hodgkin, Ed.D., R.D., FADA, Loma Linda University
Steven P. Hooker, Ph.D., University of South Carolina
Lucia Kaiser, Ph.D., R.D., UC Davis
Stacey Kennedy, M.S., R.D., California Rural Indian Health Board, Inc.
Kelley Knapp, M.S., R.D., CDE
Edye Kuypers, M.S., CDPH
Diana M. Lee, M.P.H., R.D., CDPH
Rae Lynne Lee, M.P.H., R.D., CDE
Susan K. Mattingly, M.S., R.D., CDPH
Barbara MkNelly, M.S., CDPH
Josephine Ngai, M.P.H., R.D., CDPH
Kim P Nguyen, M.S.
Alexandra E. Ossa, M.P.H., CDPH
Toni Piechota, M.P.H., M.S., R.D., CDPH
Jan Schilling, M.P.H., M.S., R.D.
Cindy Schneider, M.P.A., R.D., CDE
Aditi Shah, M.P.H., R.D., Loma Linda University
Poppy Strode, M.P.H., M.S., R.D., CDPH
Sharon Sugerman, M.S., R.D., FADA, CDPH
Judy Sundquist, M.P.H., R.D., DHCS
Tammie Voss, M.A., R.D.
May Wang, Dr.P.H., R.D., University of California at Berkeley
Melinda Yu, CDPH
# Table of Contents

## Chapters

1. **Introduction**  
   by Seleda Williams, M.D., M.P.H., B.H.E./Dietetics..............................1-30

**Section: Food Groups**

2. **Fruit and Vegetables**  
   by Desiree Backman, Dr.P.H. M.S., R.D., Sharon Sugereman, M.S., R.D.,  

3. **Whole Grains**  
   by Susan Mattingly, M.S., R.D..........................................................1-9

4. **Milk and Milk Products**  
   by Mary Anne Burkman, M.P.H., R.D. and May C. Wang, Dr.P.H., R.D......1-16

5. **Protein Foods**  
   by Paula Benedict Griffin, M.P.H., R.D..............................................1-15

6. **Fats**  
   by Toni Piechota M.P.H., M.S., R.D., and Aditi Shah M.P.H., R.D...........1-23

**Section: Lifecycle**

7. **Prenatal Nutrition**  
   by Catherine Culleton, M.S., R.D......................................................1-25

8. **Maternal Nutrition During Lactation**  
   by Paula Benedict Griffin, M.P.H., R.D..............................................1-28

9. **Normal Infant Feeding (0-12 Months)**  
   by Suzanne Haydu, M.P.H., R.D. and Judy Sundquist, M.P.H., R.D...........1-26

10. **1-3 Year Olds**  
    by Poppy Strode M.P.H., M.S., R.D., Kelley Knapp M.S., R.D., and Josephine Ngai  
    M.S., R.D........................................................................1-18

11. **4-8 Year Olds**  
    by Cindy Schneider M.P.A., R.D......................................................1-11

12. **9-18 Year Olds**  
    by Alyssa Ghirardelli, M.P.H., R.D..................................................1-34
13. 19-50 Year Olds

14. 51+ Year Olds
by Carol Hance R.D. 1-15

Section: Physical Activity

15. Physical Activity
by Steven P. Hooker, Ph.D. and Jim Carman, M.S. 1-19

Section: Ethnic Dietary Issues

16. Health and Dietary Issues Affecting Latinos
by Lucia Kaiser, Ph.D., R.D. 1-14

17. Health and Dietary Issues Affecting African Americans
by Linda L. Cowling, M.P.H., R.D. 1-19

18. Health and Dietary Issues Affecting Asians
by Kim-Phuc Nguyen, M.S. 1-12

19. Health and Dietary Issues Affecting American Indians
by Stacey Kennedy, M.S., R.D. 1-7

20. Health and Dietary Issues Affecting Eastern Europeans & Middle Easterners
by Sharmila Chatterjee M.Sc., M.S., R.D., C.D.E. 1-9

Section: Health Status Issues

21. Body Weight
by Sharon B. Sugerman, M.S., R.D., F.A.D.A. and Amy C. Fong, B.S. 1-50

22. Cardiovascular Disease
by Sharon B. Sugerman, M.S., R.D., F.A.D.A. and Alexandra E. Ossa, M.P.H. 1-31

23. Diabetes
by Lucia Kaiser Ph.D, R.D. and Rae Lynne Lee M.P.H., R.D. 1-11

24. Iron Deficiency
by Jan Schilling, M.S, M.P.H., R.D. and Sheri Zidenberg-Cherr, Ph.d. 1-11
25. Hunger and Food Insecurity
by Barbara McNelly, M.S., Edye Kuyper, M.S. and Stephanie Nishio, M.P.H., R.D.................................................................1-33

26. Environmental Contaminants of Food
by Jan Schilling M.P.H., M.S., R.D. and Diana Lee M.P.H., R.D...............1-15

27. Vegetarian Diets
by Georgia Hodgkin, Ed.D., R.D., F.A.D.A. and Ella Haddad, Dr.P.H., R.D....1-16